I claim:

1. A method for assessing chemosensitivity of patient cells comprising the steps of:

a) harvesting a specimen of a patient's tissue, cells ascites, or effusion fluid;

b) separating said specimen into multicellular particulates;

c) growing a tissue culture monolayer from said cohesive multicellular particulates;

d) inoculating cells from said monolayer into a plurality of segregated sites; and

e) treating said plurality of sites with at least one treating means, followed by assessment of sensitivity of the cells in said site to said at least one treating means.

2. The method according to claim 1 wherein step a) further comprises the step of

a) preparing a specimen which was harvested from a sample of patient tumor tissue.

3. The method according to claim 1 wherein said plurality of segregated sites further comprises a plate containing a plurality of wells therein.

4. The method according to claim 1 wherein step e) further comprises the step of:

e) treating said plurality of sites with a plurality of active agents at varied concentrations, followed by assessment of optimal chemosensitivity with respect to a single active agent at a single concentration.

5. The method according to claim 1 wherein said treating means further comprises:

treating said plurality of sites with a plurality of active agents over a length of time adequate to permit assessment of both initial cytotoxic effect and longer-term inhibitory effect of at least one of said plurality of active agents.

6. The method according to claim 1 wherein the sensitivity assayed according to step e) is anti-cancer sensitivity.

7. The method according to claim 1 wherein step d) is accomplished using a Terasaki dispenser.

8. The method according to claim 1 wherein the cells in step d) are prepared in suspension prior to inoculation into a plurality of wells in a culture plate.

9. The method according to claim 1 wherein said treating means is a chemotherapeutic agent.

10. The method according to claim 1 wherein said active agent is a wound healing agent.

11. The method according to claim 1 wherein said treating means is a radiation therapy and/or a radiation therapy sensitizing or ameliorating agent.

12. The method according to claim 1 where said treating means is an immunotherapeutic agent.

13. The method according to claim 1 wherein the step of assessment of sensitivity includes monitoring culture medium in which the monolayer is grown for production of soluble factors indicative of a disease state or lack thereof.

14. The method according to claim 1 wherein the step of assessment of sensitivity includes histochemical or immunohistochemical detection of cellular markers.

15. A method for identifying chemosensitivity of patient cells comprising the steps of:

a) harvesting a specimen of a patient's tissue, cells ascites, or effusion fluid;

b) separating said specimen into multicellular particulates;

c) growing a tissue culture monolayer from said cohesive multicellular particulates; and

d) immunohistochemically staining said cells to identify one or more cellular factors.

16. A method for identifying secreted cellular antigens produced by patient cells comprising the steps of:

a) harvesting a specimen of a patient's tissue, cells ascites, or effusion fluid;

b) separating said specimen into multicellular particulates;

c) growing a tissue culture monolayer in culture medium from said cohesive multicellular particulates; and

d) assaying said culture medium for secreted factors.

17. The method according to claim 1 wherein said treating means is a gene therapy agent.

18. The method according to claim 17 wherein said gene therapy agent is an antisense oligonucleotide.

19. The method according to claim 1 wherein said treating means is a combination of two or more therapeutic agents.

20. The method according to claim 1 wherein said treating means is a hormone.

21. The method according to claim 1 wherein said treating means is a biological response modifier.

add C1

add F1

add G1